

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 5

REMARKS AND ARGUMENTS

The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicant asserts that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 18-29 and 31-34 are pending in the application. Claims 18-29 and 31-34 have been rejected. Claims 18, 25, 28, 29, 31 and 34 have been amended.

Applicant respectfully asserts that the amendments to the claims add no new matter.

The Telephone Conversation

During a telephone conversation with Applicant's Representative, Caleb Pollack, Reg. No. 37,912 on July 9, 2004, a provisional election was made with traverse to prosecute the invention of group II, including claims 18-29 and 31-34. This election is hereby affirmed.

CLAIM REJECTIONS

35 U.S.C. § 102 Rejections

In the Office Action, the Examiner rejected claims 18-19, 21-24, 26, 31 and 33-34 under 35 U.S.C. § 102(b), as being anticipated by Boester (US 3,543,294). Applicant respectfully traverses this rejection in view of the remarks that follow.

Amended independent claims 18 and 31 recite an "upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force". Boester

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 6

discloses "A motor driven pump draws water through pipe 10 to a reservoir B where it is maintained under pressure of approximately 30 pounds per square inch and is conducted through pipe 11 to one or more household flush boxes ..." (column 1, line 63, to column 2, line 3). The Examiner identified Applicants "upper tank" with tank 13, and bowl 14 with "water target". Boester does not teach or suggest the use of gravitational force in transferring the collected gray water from reservoir B to a plurality of water targets as recited in amended independent claims 18 and 31. Furthermore, tank 13, according to Boester, as seen in the '294 Figure, has the capacity for a single flush into bowl 14, in contrast to the Applicant's "upper tank", as recited in claims 18 and 31, which has a capacity for multiple flushes to a plurality of water targets.

Applicant respectfully disagrees with the Examiner's identification of "upper tank" with tank 13. Applicant notes that "upper tank", as recited in claims 18 and 31, may provide water to a plurality of water targets, therefore the "upper tank" as recited in the claim does not relate to the flush tank 13, which may provide water to a single flush box and bowl. Accordingly, Boester does not teach or suggest the use of gravitational force in transferring the collected gray water to a plurality of water targets as recited in amended independent claims 18 and 31. For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, Boester cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 19, 21-24, 26 and 33-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 19, 21-24, 26, and 33-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 19, 21-24, 26, and 33-34 dependent thereon, as being anticipated by Boester under 35 U.S.C. § 102(b).

In the Office Action, the Examiner rejected claims 18, 20-24, 26-27 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by Hellwege (US 3,616,917). Applicant respectfully traverses this rejection in view of the remarks that follow.

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 7

Amended independent claim 18 recites an "upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force". Hellwege discloses that "The wash water may reach the spray 5 from a suitable supply tank 8, which may be heated, and may be withdrawn from the tank and supplied to the spray apparatus 5 by means of a pump 9" (column 1, lines 35-38). Accordingly, Hellwege requires a pump to provide recycled water from a supply tank, which is not indicated or suggested as being at a higher altitude than spray 5, to a water target (e.g., spray apparatus), and does not teach or suggest releasing gray water from an upper tank to a water target using gravitational force, as recited in amended independent claim 18. For a reference to anticipate a claim, the reference must teach all elements of the claim. Furthermore, amended independent claim 31 has substantially similar language to claim 18 as cited above. Therefore, Hellwege cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 20-24, 26-27, and 32-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 20-24, 26-27, and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 20-24, 26-27, and 32-34 dependent thereon, as being anticipated by Hellweg under 35 U.S.C. § 102(b).

In the Office Action, the Examiner rejected claims 18, 20-25 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by Back (US 5,868,937). Applicant respectfully traverses this rejection in view of the remarks that follow.

Amended independent claims 18 and 31 recite an "upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force". Back discloses a "a clothes washer or other gray water generator (e.g., carwash, shower) with a closed-loop membrane filtration system" (column 6, lines 32-34) that is executed, for example, in a "commercial, high-capacity washer retrofitted to contain the components necessary for the

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 8

recycle and reuse of clothes washer gray water as schematically shown in FIG. 1.” (column 5, lines 3-7). Furthermore, Back discloses “the primary components for the system are a recirculation pump 1, an ultrafiltration cartridge 2 using a membrane filter constructed with hollow fiber cross-flow membrane elements, a gray water processing or holding vessel 3, check valve 4, a washer spin motor and discharge pump 5, and a commercially available high-capacity polyester felt bag prefilter 6 ...” (column 5, lines 7-13). The Back invention therefore relates to a recycling system including a gray water processing or holding vessel 3, incorporated within a water consuming appliance, that requires a recirculation pump and does not relate to a water recycling system which includes an “upper tank” situated at an altitude higher than a plurality of water targets, that provides gray water to a plurality of water targets using gravitational force, as recited in amended independent claims 18 and 31. For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, Back cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 20-25 and 32-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 20-25 and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 20-25 and 32-34 dependent thereon, as being anticipated by Back under 35 U.S.C. § 102(b).

In the Office Action, the Examiner rejected claims 18, 20-24, 26-29 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by McCormick (US 4,162,218). Applicant respectfully traverses this rejection in view of the remarks that follow.

Amended independent claims 18 and 31 recite an “upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force”. McCormick discloses “a demand for gray water by gray water usage devices 16, 17, when it sufficiently drops the pressure line 14, will through the pressure switch 13 actuate the pump 11 to answer such demand for gray water. The pump 11 eventually restores pressure in the pressure tank

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 9

15 as when gray water is no longer being drawn through the pipe 14, and is shut off by pressure switch 13 ..." (column 4, lines 4-14). McCormick requires a pressure switch and pump to maintain pressure in a pressure tank 15, which is not indicated or suggested as being located at a higher altitude than water use devices (e.g., flush tank). McCormick therefore does not teach or suggest the use of gravitation force in transferring the collected gray water from an upper tank to a lower water target using gravitational force, as recited in amended independent claims 18 and 31. For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, McCormick cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 20-24, 26-29 and 32-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 20-24, 26-29 and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 20-24, 26-29 and 32-34 dependent thereon, as being anticipated by McCormick under 35 U.S.C. § 102(b).

In the Office Action, the Examiner rejected claims 18-24, 26-29 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by Toms (US 4,115,879). Applicant respectfully traverses this rejection in view of the remarks that follow.

Amended independent claims 18 and 31 recite an "upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force, said gray water entering said water target through a low pressure valve having substantially similar thickness to an inlet pipe that transfers said gray water from said upper tank to said water target." Usage of the low pressure valve, as recited in amended claims 18 and 31 may enable "... the water to flow into the flush tank 40 at low pressure, but at a substantial rate. In this way, the gray water from the expansion tank 30 may flow under the force of gravity into the flush tank 40, without being restricted to the typical high-pressure valves entering such tanks. Such gravity enabled water flow may enable rapid, and relatively silent, flush tank filling, causing

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 10

fewer incidences of water pressure damage to the piping apparatus and helping avoid clogging of the valves.” (specification, page 5, paragraph 38)

Toms discloses “Water in this pipe is pumped to an upper portion of the household into an upper storage tank 30 which is of diaphragm type to maintain pressure through the gray water feed system. The tank may be hidden in a closet or be in an attic or at any appropriate location where danger of the water therein freezing does not exist. A line pressure switch 53 is interposed between the pump 28 and the tank 30. Upon flushing water closet 11, gray water from the upper storage tank 30 flows through the conduit 29 thereto to replace water flushed from the tank of water closet 11 ... the entire system is maintained under pressure by the pump 28 and by the head of pressure above the diaphragm whether in tank 30 or 30a ... When the water closets are flushed, the fall in water level in the tank results in a lower pressure upon the line pressure switch 53 which, in turn actuates pump 28 to refill the tank 30 or 30a and repeat the cycle.” (column 3, lines 40-64). Toms does not teach or suggest the use of a non-pressurized system, for example incorporating a low-pressure valve via which the gray water is transferred to the water target from a non-pressurized upper tank, which is necessarily located at a higher altitude than one or more water targets, as recited in amended independent claims 18 and 31. For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, Toms cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 19-24, 26-29 and 32-34 depend from, directly or indirectly, claims 18 and 31; and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 19-24, 26-29 and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 19-24, 26-29 and 32-34 dependent thereon, as being anticipated by Toms under 35 U.S.C. § 102(b).

In the Office Action, the Examiner rejected claims 18-24, 26-29 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by Kimball (US 5,084,920). Applicant respectfully traverses this rejection in view of the remarks that follow.

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 11

Amended independent claims 18 and 31 recite an "upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force". Kimball discloses "storage tank 11 is connected by a second conduit 33 to a water closet 26 of a toilet fixture in the facility, which in this illustrative embodiment is disposed at a level above that of the storage tank 11. A pump 32 is disposed in the conduit 33. The pump 32 and all other electrical devices to be mentioned hereinafter are electrically connected to an electrical control panel 51 mounted at a convenient location in the facility. When activated, the pump 32 pumps gray water from the tank 11 through conduit 33 to the water closet 26." (column 4, lines 7-16). The Examiner identified Applicants "upper tank" with water closet (e.g., flush tank) 26. Kimball does not teach or suggest the use of gravitational force in transferring the collected gray water from water closet 26 to a plurality of water targets as recited in amended independent claims 18 and 31. Furthermore, tank 26, according to Kimball, as seen in the '920 Figure, has the capacity for a single flush into toilet bowl 35, in contrast to the Applicant's "upper tank", as recited in claims 18 and 31, which has a capacity for multiple flushes to a plurality of water targets.

Furthermore, Applicant respectfully disagrees with the Examiner's identification of "upper tank" with tank 26. Applicant notes that "upper tank", as recited in claims 18 and 31, may provide water to a plurality of water targets, therefore the "upper tank" as recited in the claim does not relate to tank 26, which may provide water to a single toilet. Accordingly, Kimball does not teach or suggest the use of gravitation force in transferring the collected gray water to a plurality of water targets as recited in amended independent claims 18 and 31. For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, Kimball cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 19-24, 26-29 and 32-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 19-24, 26-29 and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 19-24, 26-29 and 32-34 dependent thereon, as being anticipated by Kimball under 35 U.S.C. § 102(b).

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 12

In the Office Action, the Examiner rejected claims 18, 20-22, 24, 28-29 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by Fleischmann (US 2,974,800). Applicant respectfully traverses this rejection in view of the remarks that follow.

Amended independent claims 18 and 31 recite "allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force, said gray water entering said water target through a low pressure valve having substantially similar thickness to an inlet pipe that transfers said gray water from said upper tank to said water target." Fleischmann discloses "a drain conduit 11 leads from this bowl to an agitating tank 12 ... A conduit 21 leads from the upper regions of the tank 16 to a suitable septic tank 22 which will be buried in the ground ... Within the septic tank 22 I provide a pump generally indicated at 23 ... The conduit 26 has an extension 31 which leads to a storage tank or auxiliary tank 32 having a connection 33 with the standard toilet closet 34." (column 4, line 28, to column 5, line 19). Fleischmann does not teach or suggest the transferring of collected gray water to a plurality of water targets, from an upper tank, via a low pressure valve, as recited in amended independent claims 18 and 31. As described above in detail, usage of such a low pressure valve may enable rapid, and relatively silent, flush tank filling, causing fewer incidences of water pressure damage to the piping apparatus and helping avoid clogging of the valves." (page 5, paragraph 38). For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, Fleischmann cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 20-22, 24, 28-29 and 32-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 20-22, 24, 28-29 and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 20-22, 24, 28-29 and 32-34 dependent thereon, as being anticipated by Fleischmann under 35 U.S.C. § 102(b).

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 13

In the Office Action, the Examiner rejected claims 18, 20-24, 26-29 and 31-34 under 35 U.S.C. § 102(b), as being anticipated by Olson (US 3,915,857). Applicant respectfully traverses this rejection in view of the remarks that follow.

Amended independent claims 18 and 31 recite an "upper tank being situated at an altitude higher than said plurality of water targets; and allowing said gray water from said upper tank to flow to said plurality of water targets using gravitational force". Olson discloses "a receiving tank for receiving and holding white water effluent is shown at 11. Tank 11 is connected through pump 14, operated by motor 15, to filter tank 12 by feed line 16 and by return line 17 which passes through three-way valve 18. Line 17 is also connected through three-way valve 18 to line 19 which in turn is connected to pressure tank 13. Pressure tank 13 is connected to the household system through line 20. The domestic water supply is connected to pressure tank 13 via line 21 and valve 22." (column 2, lines 19-28). Olson requires a pressure tank to supply gray water to the household system, and does not teach or suggest, the use of gravitation force in transferring the collected gray water from an additional upper storage tank (e.g., that is located at a higher altitude than the household system) to a plurality of water targets, as recited in amended independent claims 18 and 31. For a reference to anticipate a claim, the reference must teach all elements of the claim. Therefore, Olson cannot anticipate claims 18 and 31 as amended.

Accordingly, Applicant respectfully asserts that amended independent claims 18 and 31 are allowable. Claims 19, 20-24, 26-29 and 32-34 depend from, directly or indirectly, claims 18 and 31, and therefore include all the limitations of those claims. Therefore, Applicant respectfully asserts that claims 19, 20-24, 26-29 and 32-34 are likewise allowable. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to independent claims 18 and 31 and to claims 19, 20-24, 26-29 and 32-34 dependent thereon, as being anticipated by Olson under 35 U.S.C. § 102(b).

Applicant respectfully requests reconsideration and withdrawal of the rejections of claims 18-30 and 31-34.

APPLICANT(S): BEN-AMOTZ, Ori
SERIAL NO.: 10/734,119
FILED: December 15, 2003
Page 14

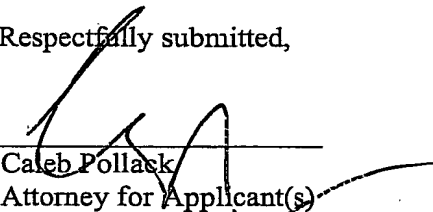
CONCLUSION

In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Fees for a one-month extension of time are being requested separately. No other fees associated with this paper are believed to be due. If any such fees are due, Examiner is hereby authorized to charge such fees to deposit account No. 05-0649.

Respectfully submitted,


Caleb Pollack
Attorney for Applicant(s)
Registration No. 37,912

Dated: November 11, 2004

Eitan, Pearl, Latzer & Cohen Zedek, LLP.
10 Rockefeller Plaza, Suite 1001
New York, New York 10020
Tel: (212) 632-3480
Fax: (212) 632-3489